

McKinsey Global Institute

Updated research



August 2011

# Mapping global capital markets 2011

Charles Roxburgh  
Susan Lund  
John Piotrowski

## The McKinsey Global Institute

The McKinsey Global Institute (MGI), the business and economics research arm of McKinsey & Company, was established in 1990 to develop a deeper understanding of the evolving global economy. Our goal is to provide leaders in the commercial, public, and social sectors with the facts and insights on which to base management and policy decisions.

MGI research combines the disciplines of economics and management, employing the analytical tools of economics with the insights of business leaders. Our “micro-to-macro” methodology examines microeconomic industry trends to better understand the broad macroeconomic forces affecting business strategy and public policy. MGI’s in-depth reports have covered more than 20 countries and 30 industries. Current research focuses on four themes: productivity and growth; the evolution of global financial markets; the economic impact of technology and innovation; and urbanization. Recent reports have assessed job creation, resource productivity, cities of the future, and the impact of the Internet.

MGI is led by three McKinsey & Company directors: Richard Dobbs, James Manyika, and Charles Roxburgh. Susan Lund serves as director of research. Project teams are led by a group of senior fellows and include consultants from McKinsey’s offices around the world. These teams draw on McKinsey’s global network of partners and industry and management experts. In addition, leading economists, including Nobel laureates, act as research advisers.

The partners of McKinsey & Company fund MGI’s research; it is not commissioned by any business, government, or other institution. For further information about MGI and to download reports, please visit [www.mckinsey.com/mgi](http://www.mckinsey.com/mgi).

## About this research

MGI is committed to ensuring that published research remains current and relevant. This research update offers readers refreshed data and analysis from our September 2009 report *Global capital markets: Entering a new era*.

In this update, we examine how the world’s financial markets are recovering after the 2008 financial crisis. We offer new data for more than 75 countries on the growth and composition of their financial stock, cross-border capital flows, and foreign investment assets and liabilities. We discuss implications for businesses, policy makers, and financial institutions, and we invite others to contribute to this dialogue.

In Fall 2011, MGI will release a full update to the January 2010 report *Debt and deleveraging: The global credit bubble and its economic consequences*.

# Mapping global financial markets 2011

The 2008 financial crisis and worldwide recession halted an expansion of global capital and banking markets that had lasted for nearly three decades. Over the past two years, growth has resumed. The total value of the world's financial stock, comprising equity market capitalization and outstanding bonds and loans, has increased from \$175 trillion in 2008 to \$212 trillion at the end of 2010, surpassing the previous 2007 peak.<sup>1</sup> Similarly, cross-border capital flows grew to \$4.4 trillion in 2010 after declining for the previous two years.

Still, the recovery of financial markets remains uneven across geographies and asset classes. Emerging markets account for a disproportionate share of growth in capital raising as mature economies struggle. Debt markets remain fragile in many parts of the world, and the growth of government debt and of Chinese lending accounts for the majority of the increase in credit globally.

In this research update, we provide a fact base on how the world's financial markets are recovering.<sup>2</sup> We draw on refreshed data from three proprietary McKinsey Global Institute (MGI) databases that cover the financial assets, cross-border capital flows, and foreign investments of more than 75 countries through the end of 2010. These data provide a granular view of the growth in the world's financial markets and asset classes. The goal of this paper is to provide an overview of the key trends and share preliminary thoughts on their implications. We invite others to add to this discussion and draw out specific implications for different actors within the global financial system. Among our key findings are these:

- The global stock of debt and equity grew by \$11 trillion in 2010. The majority of this growth came from a rebound in global stock market capitalization and growth in government debt securities.
- The overall amount of global debt outstanding grew by \$5 trillion in 2010, but growth patterns varied. Government bonds outstanding rose by \$4 trillion, while other forms of debt had mixed growth. Bonds issued by financial institutions and securitized assets both declined, while corporate bonds and bank loans both grew.
- Lending in emerging markets has grown particularly rapidly, with China adding \$1.2 trillion of net new lending in 2010 and other emerging markets adding \$800 billion.<sup>3</sup>
- Cross-border capital flows grew in 2010 for the first time since 2007, reaching \$4.4 trillion. These flows remain 60 percent below their peak due mainly to a

---

1 In contrast to previous reports, this year we include loans outstanding in the global financial stock rather than deposits. This gives a view of the capital raised by corporations, households, and governments around the world. We continue to maintain data on global deposits as well.

2 MGI began research on mapping global capital markets in 2005. The last report in this series was *Global capital markets: Entering a new era*, September 2009. That report, and other MGI research on global financial markets, is available at [www.mckinsey.com/mgi](http://www.mckinsey.com/mgi).

3 Throughout this paper, China refers to the mainland of the country, excluding Hong Kong, which we treat separately.

dramatic reduction in interbank lending as well as less direct investment and fewer purchases of debt securities by foreign investors.

- The world’s investors and companies continue to diversify their portfolios internationally, with the stock of foreign investment assets growing to \$96 trillion.
- After two years of decline, global imbalances are once again growing. The US current account deficit—and the surpluses in China, Germany, and Japan that helped fund it—increased again in 2010. These global imbalances in saving and consumption remain smaller than their pre-crisis peaks but appear persistent.

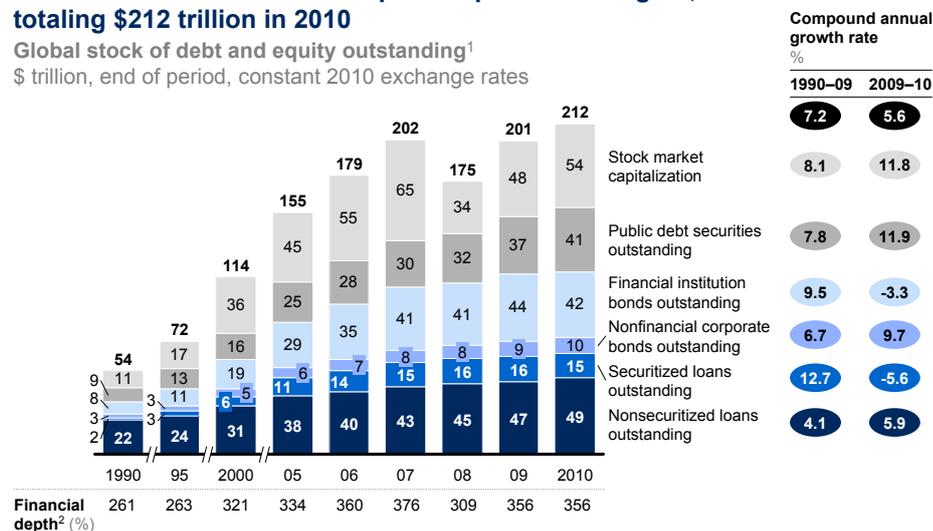
**THE GLOBAL FINANCIAL STOCK GREW BY \$11 TRILLION IN 2010, SURPASSING ITS 2007 LEVEL**

The world’s stock of equity and debt rose by \$11 trillion in 2010, reaching a total of \$212 trillion.<sup>4</sup> This surpassed the previous peak of \$202 trillion in 2007 (Exhibit E1). Nearly half of this growth came from an 11.8 percent increase (\$6 trillion) in the market capitalization of global stock markets during 2010. This growth resulted from new issuance and stronger earnings expectations as well as increased valuations. Net new equity issuance in 2010 totaled \$387 billion, the majority of which came from emerging market companies. Initial public offerings (IPOs) continued to migrate to emerging markets, with 60 percent of IPO deal volume occurring on stock exchanges in China and other emerging markets.

**Exhibit E1**

**Global financial stock has surpassed pre-crisis heights, totaling \$212 trillion in 2010**

Global stock of debt and equity outstanding<sup>1</sup>  
 \$ trillion, end of period, constant 2010 exchange rates



1 Based on a sample of 79 countries.  
 2 Calculated as global debt and equity outstanding divided by global GDP.  
 NOTE: Numbers may not sum due to rounding.  
 SOURCE: Bank for International Settlements; Dealogic; SIFMA; Standard & Poor’s; McKinsey Global Banking Pools; McKinsey Global Institute analysis

4 This includes the capitalization of global stock markets; the outstanding face values of bonds issued by governments, corporations, and financial institutions; securitized debt instruments; and the book value of loans held on the balance sheets of banks and other financial institutions.

### **Credit markets struggle while government debt soars**

Global credit markets also grew in 2010, albeit more unevenly.<sup>5</sup> The total value of all debt—including bonds issued by corporations, financial institutions, and governments; asset-backed securities; and bank loans held on balance sheets—reached \$158 trillion, an increase of \$5.5 trillion from the previous year. Government debt grew by 12 percent and accounted for nearly 80 percent of net new borrowing, or \$4.4 trillion. This reflected large budget deficits in many mature economies, amplified by a slow economic recovery. Government debt now equals 69 percent of global GDP, up from just 55 percent in 2008.

Bond issues by nonfinancial businesses remained high in 2010 at \$1.3 trillion—that's more than 50 percent above the level prior to the 2008 crisis. This reflected very low interest rates and possibly tighter access to bank credit. Corporate bond issuance was widespread across regions.

Bank lending grew in 2010 as well, with the global stock of loans held on the balance sheets of financial institutions rising by \$2.6 trillion (5.9 percent). Emerging markets accounted for \$2 trillion of this growth with China alone contributing \$1.2 trillion. Bank lending grew by \$300 billion in both the United States and Western Europe (5.6 and 1.5 percent, respectively) and by \$200 billion in other developed economies. However, bank loans shrank by \$200 billion in Japan. At the same time, the stock of securitized loans fell by \$900 billion. Issuance of securitized assets remains at less than two-thirds of its pre-crisis level. Indeed, if we exclude mortgage-backed securities issued by US government entities (e.g., Fannie Mae and Freddie Mac), securitization volumes are only 17 percent of their pre-crisis level. Whether or not securitization outside of government entities will emerge as a significant source of credit in the years to come remains to be seen.

On the other side of bank balance sheets, we see a shift in funding sources with more deposits and less debt. Worldwide bank deposits increased by \$2.9 trillion in 2010.<sup>6</sup> China accounted for \$1.1 trillion of the increase in bank deposits (of which roughly 60 percent was from households and 40 percent from corporations), with total Chinese deposits reaching \$8.3 trillion. This reflected the high saving rate of households and limited range of saving vehicles available to them, as well as the large retained earnings of corporations.<sup>7</sup> Bank deposits in the United States increased by \$385 billion, while deposits in Western Europe rose by \$250 billion. In contrast, the stock of bonds issued by financial institutions shrank as they sought more stable sources of funding. Financial institution bonds outstanding declined by \$1.4 trillion, the first significant decrease ever recorded in our data series that begins in 1990.

---

5 In Fall 2011, we will explore the topic of debt and deleveraging in more detail in a full update to our January 2010 report, *Debt and deleveraging: The global credit bubble and its economic consequences*.

6 We define bank deposits as deposits in time and savings accounts made by households and nonfinancial corporations. This figure excludes currency in circulation, money market instruments, and nonbank financial institutions' deposits with other entities in the banking system.

7 For more explanation of Chinese saving, see *Farewell to cheap capital? The implications of long-term shifts in global saving and investment*, McKinsey Global Institute, December 2010 ([www.mckinsey.com/mgi](http://www.mckinsey.com/mgi)); Marcos Chamon and Eswar Prasad, *Why are saving rates of urban households in China rising?* NBER working paper, 14546, December 2008.

## Emerging markets account for a growing share of global financial stock

The majority of absolute growth in the global financial stock occurred in mature markets in 2010, but emerging markets are catching up. Developed countries' financial stock grew by \$6.6 trillion, while that of emerging markets increased by \$4.4 trillion. Among emerging markets, China alone accounted for roughly half of that growth with \$2.1 trillion, reflecting large increases in bank lending and the market capitalization of the Chinese equity market.

Emerging markets' financial stock is growing much faster than that of developed countries, increasing by 13.5 percent in 2010 compared with 3.9 percent in mature countries. This trend has been the norm for some time. From 2000 to 2009, the stock of equity and debt in emerging markets grew by an average of 18.3 percent a year compared with only 5.0 percent in developed countries. So while emerging markets collectively account for only 18 percent of the world's total financial stock at the end of 2010, they are in the process of catching up and are becoming important players in the global financial landscape.

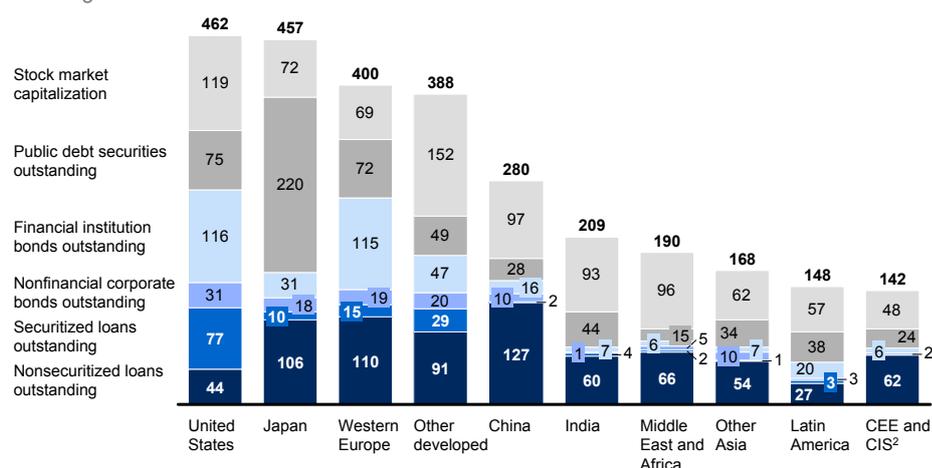
Looking ahead, the long-term fundamental drivers of financial market growth remain strong in developing economies. Many of these economies have high national saving rates that create large sources of capital for investment, and they have vast investment needs for infrastructure, housing, commercial real estate, and factories and machinery.<sup>8</sup> Moreover, their financial markets today are much smaller relative to GDP than those in mature markets. The total value of all emerging market financial stock is equal to 197 percent of GDP—161 percent if we exclude China—which is much lower than the 427 percent of GDP of mature economies (Exhibit E2).

### Exhibit E2

#### Financial depth is lower in emerging markets, primarily because of the absence of corporate bond and securitization markets

Financial depth,<sup>1</sup> year end 2010

% of regional GDP



1 Calculated as total regional debt and equity outstanding divided by regional GDP.

2 Central and Eastern Europe and Commonwealth of Independent States.

SOURCE: Bank for International Settlements; Dealogic; SIFMA; Standard & Poor's; McKinsey Global Banking Pools; McKinsey Global Institute analysis

<sup>8</sup> For projections on growth in investment demand in emerging markets, see *Farewell to cheap capital? The implications of long-term shifts in global saving and investment*, McKinsey Global Institute, December 2010 ([www.mckinsey.com/mgi](http://www.mckinsey.com/mgi)).

More specifically, we see ample potential for growth by looking at individual asset classes. Emerging market equities, for example, have significant headroom to grow as more state-owned enterprises are privatized and as existing companies expand. Markets for corporate bonds and other private debt securities remain nascent. The value of corporate bonds and securitized assets is equal to just 7 percent of GDP in emerging markets compared to 34 percent in Europe and 108 percent in the United States. With the appropriate regulatory changes, corporate bond markets in emerging markets could provide an alternative to bank financing, and some of the plain vanilla forms of securitization (such as those backed by low-risk prime mortgages) could develop.

Bank deposits also constitute an asset class with enormous growth potential in the developing world, where large swaths of the population have no bank accounts. There are an estimated 2.5 billion adults with discretionary income who are not part of the formal financial system.<sup>9</sup> Bank deposits will swell as household incomes rise and individuals open savings accounts.

In contrast, prospects for rapid growth in private debt securities and equity in mature economies are relatively dim. The circumstances that fueled the rapid increases of past decades have changed, and this makes it likely that total financial assets will grow more in line with GDP in coming years. For instance, debt issued by financial institutions accounted for 42 percent of the \$115 trillion increase in private-sector debt since 1990, with growth in asset-backed securities accounting for an additional 16 percent. However, securitization is now negligible outside government programs, and financial institutions are reducing their use of debt financing as they increase their capital levels and raise more deposits. In equities, net new issuance of equities has been low and was actually negative from 2005 to 2007. Corporate profits are at historic highs relative to GDP. This means that further equity market growth would have to come either from higher equity valuations or from further increases in corporate earnings as a share of GDP.

### **GLOBAL CAPITAL FLOWS ARE RECOVERING, REACHING \$4.4 TRILLION IN 2010**

One of the most striking consequences of the 2008 financial crisis was a steep drop in cross-border capital flows, including foreign direct investment (FDI), purchases and sales of foreign equities and debt securities, and cross-border lending and deposits. These capital flows fell by about 85 percent during the crisis from \$10.9 trillion in 2007 to just \$1.9 trillion in 2008 and to \$1.6 trillion in 2009. This reflects the plunge in demand for foreign investment by banks, companies, and other investors during the global financial turmoil. Cross-border capital flows picked up in 2010 as the economic recovery took hold, reaching \$4.4 trillion (Exhibit E3). Nonetheless, they remain at their lowest level relative to GDP since 1998.

This decline in cross-border capital flows during a recession fits the historical pattern. Cross-border investing had experienced three other boom-and-bust cycles since 1990, with sharp declines following the economic and financial turmoil in 1990–91, 1997–98, and 2000–02. The question today is whether cross-border capital flows after the most recent recession will eventually exceed their previous heights, as

---

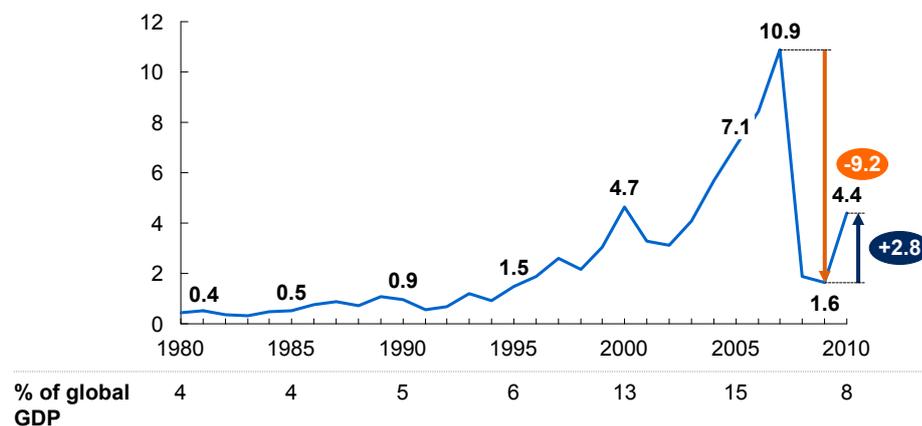
<sup>9</sup> See Alberto Chaia, Tony Goland, and Robert Schiff, "Counting the world's unbanked," *McKinsey Quarterly*, March 2010; Alberto Chaia et al, *Half the world is unbanked*, The Financial Access Initiative, October 2009.

they have after past recessions, or whether new regulations and shifts in investor sentiment will dampen such flows.

### Exhibit E3

#### Cross-border capital flows grew to \$4.4 trillion in 2010, or 40 percent of their 2007 level

Total cross-border capital inflows, 1980–2010<sup>1,2</sup>  
\$ trillion, constant 2010 exchange rates



<sup>1</sup> "Inflows" defined as net purchases of domestic assets by nonresidents (including nonresident banks); total capital inflows comprised of inward FDI and portfolio (e.g., equity and debt) and lending inflows.

<sup>2</sup> Based on a sample of 79 countries.

SOURCE: International Monetary Fund; Institute of International Finance; McKinsey Global Institute analysis

#### Contraction of interbank lending led the decline in capital flows

Nearly all types of capital flows have declined relative to their 2007 peak, but the largest decrease has been in cross-border bank lending. During 2008 and 2009, these flows turned negative, indicating that on a net basis creditors brought their capital back to their home markets. Cross-border lending resumed in 2010, but these flows are still \$3.8 trillion below their peak, amounting to just \$1.3 trillion in 2010.<sup>10</sup> Interbank lending in Western Europe accounted for 61 percent, or \$2.3 trillion, of the total decline in cross-border lending. This reflects the uncertainty created by the sovereign debt crisis in Europe and the continuing fragility of the financial system.

Equity cross-border flows have been less volatile than debt flows. Foreign direct investment has historically been the least volatile type of capital flow as it reflects long-term corporate investment and purchases of less liquid assets, such as factories and office buildings. Recent years have proved no exception. FDI flows totaled \$900 billion in 2010, roughly 45 percent of their 2007 peak, while purchases of foreign equities by investors totaled \$670 billion, 30 percent below their 2007 level.

#### Cross-border capital flows to emerging markets have been less volatile than those to developed countries

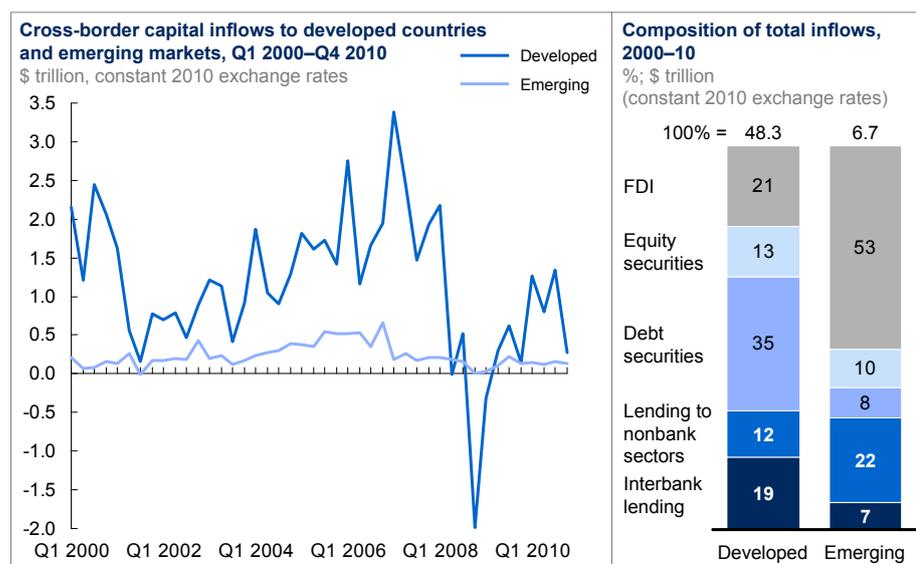
Contrary to the common perception that capital flows to emerging markets are highly volatile, we observe that flows between developed countries are more volatile. When adjusting for average size, capital flows to developed countries are 20 percent more volatile than flows to emerging markets. Most of this variability comes from cross-border lending, which is nearly four times as volatile as FDI. In the 2008 crisis, capital flows between mature countries turned negative in the fourth quarter of 2008

<sup>10</sup> Similarly, growth of interbank lending, particularly in Western Europe, explains part of the growth in global capital flows prior to the 2008 financial crisis.

and the first quarter of 2009, indicating that foreign investors sold investments and repatriated their money back to their home country. During the same period, quarterly capital flows to emerging markets fell by \$150 billion but remained positive, indicating that foreign investors did not withdraw money back to their home countries and continued to make new investments (Exhibit E4).

#### Exhibit E4

### Capital flows to emerging markets are smaller but more stable than flows to developed countries



SOURCE: International Monetary Fund; McKinsey Global Institute analysis

The lower volatility of capital flows to emerging markets partly reflects the fact that more than 60 percent of such flows over the past decade—and in particular FDI—have been in equity investments. As we have explained, this is the most stable type of capital flow. In contrast, just one-third of foreign investment flows into mature markets are in equity investments.

In 2010, foreign capital inflows to Latin America surged, reaching \$254 billion—more than flows to China, India, and Russia combined. This total was 60 percent higher than in 2009 and four times as high as their annual average from 2000 to 2007. Foreign investors purchased \$76 billion of Latin American government and corporate bonds in 2010, while \$59 billion constituted cross-border lending. In contrast to flows to other emerging markets, only 31 percent of total flows to Latin America were in the form of FDI. Across countries, Brazil received a majority of foreign capital inflows, accounting for \$157 billion of the total. This surge in foreign investor interest has prompted concerns about unwanted exchange-rate appreciation in Brazil.

Emerging markets are also becoming more important foreign investors in world markets as their capital outflows grow rapidly. Foreign investments from emerging market investors reached \$922 billion in 2010, or 20 percent of the global total. This is up sharply from just \$280 billion, or 6 percent of the global total, in 2000. A large part of this investment outflow—61 percent—reflected purchases of foreign securities by central banks. However, investments from other investors, including corporations, individuals, and sovereign wealth funds, are also rising. FDI from emerging markets reached \$159 billion, lower than its 2008 peak but still more than double its size five years earlier. Although China's outward FDI has attracted significant

attention, it remains less than that from the former countries of the Soviet Union in the Commonwealth of Independent States (\$44 billion for China compared with \$60 billion from CIS). Emerging market investors will become increasingly important players in foreign markets as their economies grow.

### THE STOCK OF CROSS-BORDER INVESTMENTS HIT \$96 TRILLION IN 2010, BUT GLOBAL IMBALANCES ARE GROWING AGAIN

Reflecting the growth of global capital flows, the world's stocks of foreign investment assets and liabilities also increased in 2010. Global foreign investment assets reached \$96 trillion, nearly ten times the amount in 1990, as companies and investors sought to diversify their portfolios globally. Not surprisingly, investors from developed countries account for the largest share of these assets (87 percent). The United States is the world's largest foreign investor, with \$15.3 trillion in foreign assets, followed by the United Kingdom with \$10.9 trillion and Germany with \$7.3 trillion. Foreign investment assets owned by emerging markets have grown at twice the pace of those of mature countries, as their outward foreign investment flows increase.

Looking at the net position of each country's foreign assets and liabilities reveals a different picture. We see that the United States is the world's largest net foreign debtor, with foreign liabilities exceeding assets by \$3.1 trillion, or 21 percent of GDP (Exhibit E5). This reflects the persistent US current account deficit, which must be funded with net foreign borrowing. Spain is the world's second-largest foreign debtor, with a net foreign debt of \$1.3 trillion, or 91 percent of GDP. Australia has run a large current account deficit for many years and is the third-largest foreign debtor with a net debt of \$752 billion (63 percent of GDP).

#### Exhibit E5

#### In 2010, the United States was the world's largest foreign debtor and Japan the globe's largest foreign creditor

Net position, 2010<sup>1</sup>  
\$ billion

Largest net foreign debtors <sup>1</sup>			Largest net foreign creditors <sup>1</sup>			
		Assets	Liabilities		Assets	Liabilities
United States	-3,072	15,284	18,356	Japan	3,010	3,748
Spain	-1,263	1,673	2,936	China	2,193	1,699
Australia	-752	1,044	1,796	Germany	1,207	6,116
Brazil	-703	587	1,290	Saudi Arabia	882	202
Italy	-453	2,734	3,187	Switzerland	698	2,348
United Kingdom	-446	10,943	11,390	Hong Kong	691	2,032
Mexico	-355	259	613	Taiwan	626	389
Greece	-331	315	646	United Arab Emirates	585	198
France	-325	6,622	6,947	Singapore	492	884
Poland	-308	162	470	Norway	360	762

<sup>1</sup> Calculated as foreign investment assets less foreign investment liabilities.

SOURCE: International Monetary Fund; McKinsey Global Institute analysis

On the creditor side, Japan remains the world's largest net foreign creditor, with net assets of just over \$3 trillion. This may seem surprising given that Japan has the world's largest government debt at more than 200 percent of GDP. However, Japanese savers, banks, and corporations—not foreign investors—hold more than

90 percent of this debt. At the same time, Japan has significant foreign investment assets, including roughly \$1 trillion of central bank reserve assets, \$830 billion in foreign direct investment abroad, \$3.3 trillion of foreign equity and debt securities, and \$1.6 trillion in foreign lending and deposits.

China is the world's second-largest net foreign creditor with net foreign assets of \$2.2 trillion, and Germany is third (\$1.2 trillion). These are also the countries that have maintained the largest current account surpluses.

Countries' annual current account surpluses and deficits fell sharply after the 2008 financial crisis and recession, roughly halving in size. This reflected the lack of cross-border investment and a sharp decline in world trade. In 2010, however, global imbalances began to grow again. Whether or not they continue to increase will depend on saving, investment, and consumption trends within countries as well as on global currency values and trade deficits. Without higher saving rates in deficit countries, and without exchange-rate adjustments and more domestic consumption in some countries with persistently large trade surpluses, global imbalances could well grow to their pre-crisis size.



In the following pages, we provide a more detailed look at the state of the world's financial markets at the end of 2010. The data we present here come from MGI's proprietary databases on global financial markets. The exhibits that follow cover changes in the financial stock, cross-border capital flows, and foreign investment assets and liabilities of more than 75 countries around the world.



# Exhibits

## **GLOBAL FINANCIAL STOCK**

- Exhibit 1. Global financial stock, 1990–2010
- Exhibit 2. Global equity outstanding, 1990–2010
- Exhibit 3. Net equity issuances, 2005–10
- Exhibit 4. IPO deal volume by exchange location, 2000–10
- Exhibit 5. Global debt outstanding by type, 2000–10
- Exhibit 6. Nonsecuritized loans outstanding by region, 2000–10
- Exhibit 7. Securitization issuance by region, 2000–10
- Exhibit 8. Nonfinancial corporate bond issuance, 2000–10
- Exhibit 9. Global public debt outstanding, 1990–2010
- Exhibit 10. Public debt outstanding by region, 2000–10
- Exhibit 11. Deposits by region, 2000–10
- Exhibit 12. Emerging markets' share of global financial stock, 2010
- Exhibit 13. Financial depth by region, 2010
- Exhibit 14. Financial depth vs. per capita GDP, 2010

## **CROSS-BORDER CAPITAL FLOWS**

- Exhibit 15. Global cross-border capital flows, 1980–2010
- Exhibit 16. Change in cross-border capital flows by asset class, 2007–10
- Exhibit 17. Capital flows to developed and emerging markets, 2000–10
- Exhibit 18. Capital flows to and from emerging markets, 2010

## **FOREIGN INVESTMENT ASSETS AND LIABILITIES**

- Exhibit 19. Stock of global foreign investment assets, 1990–2010
- Exhibit 20a. Bilateral cross-border investment assets between regions, 1999
- Exhibit 20b. Bilateral cross-border investment assets between regions, 2009
- Exhibit 21. International investment positions by country, 2010



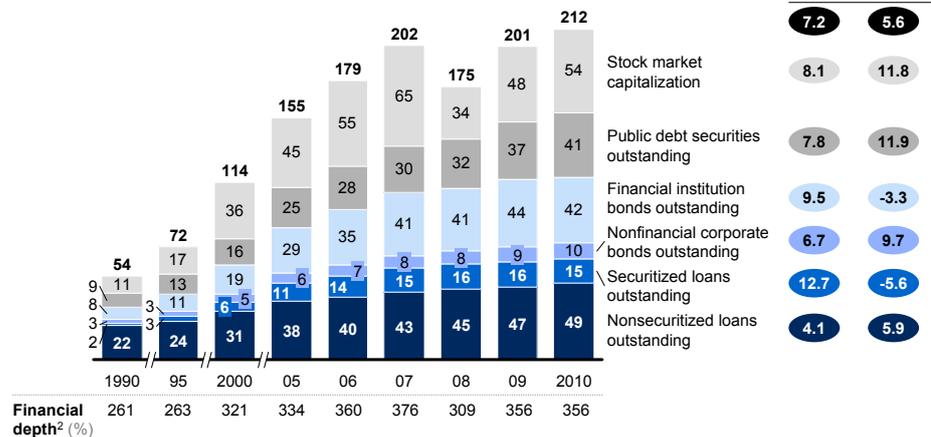
## The world's financial stock rose by \$11 trillion in 2010

### Exhibit 1

#### Global financial stock has surpassed pre-crisis heights, totaling \$212 trillion in 2010

Global stock of debt and equity outstanding<sup>1</sup>

\$ trillion, end of period, constant 2010 exchange rates



Financial depth<sup>2</sup> (%)

1 Based on a sample of 79 countries.

2 Calculated as global debt and equity outstanding divided by global GDP.

NOTE: Numbers may not sum due to rounding.

SOURCE: Bank for International Settlements; Dealogic; SIFMA; Standard & Poor's; McKinsey Global Banking Pools; McKinsey Global Institute analysis

The world's stock of equity and debt rose by \$11 trillion in 2010 to reach \$212 trillion, surpassing the previous peak of \$202 trillion in 2007. More than half of the increase came from growth in equities, which rose by 12 percent or \$6 trillion. Credit markets also grew in 2010, albeit more unevenly. Government debt increased by \$4.4 trillion, with growth concentrated in the advanced economies that were still coping with the effects of the 2008 financial crisis. Bank lending also rose with more than half of the increase coming from emerging markets. In contrast, the outstanding amounts of bonds issued by financial institutions and of securitized assets both shrank as the financial sector moved to more stable sources of funding and securitization remained at low levels.

Note: For this 2010 update, we use a new definition of the global financial stock, replacing bank deposits and currency with loans held on balance sheets.<sup>11</sup> Using loans gives a consistent perspective of the funds raised by a country's resident households, corporations, and government.

11 The McKinsey Global Institute began research on mapping global capital markets in 2005. The most recent report in this series was *Global capital markets: Entering a new era*, September 2009. That report, and other research on global financial markets, is available at [www.mckinsey.com/mgi](http://www.mckinsey.com/mgi).

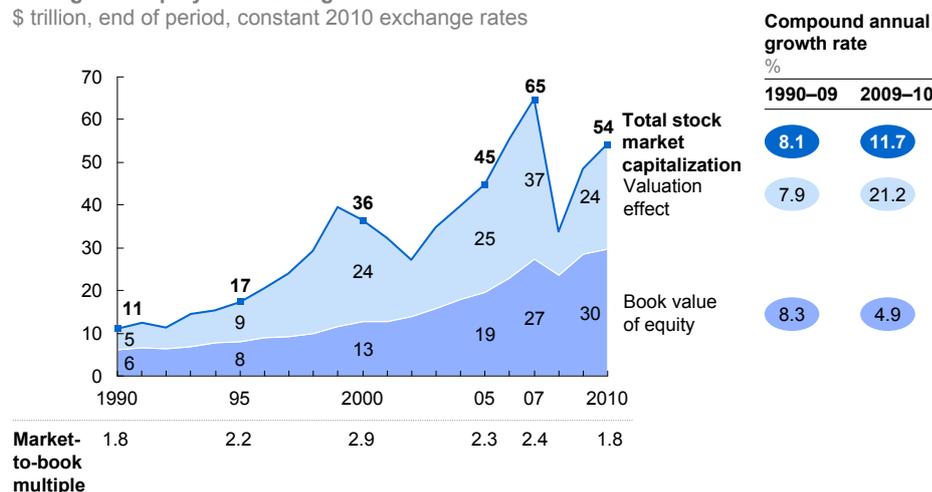
## Global stock market capitalization grew to \$54 trillion

### Exhibit 2

#### Swings in valuation levels are responsible for most of the fluctuations in global equity outstanding

Total global equity outstanding<sup>1</sup>

\$ trillion, end of period, constant 2010 exchange rates



<sup>1</sup> Calculated based on yearly country-specific market-to-book multiple.

NOTE: Numbers may not sum due to rounding.

SOURCE: Standard and Poor's; Datastream; Bloomberg; McKinsey Corporate Performance Analysis Tool (CPAT); McKinsey Global Institute analysis

The total value of equity securities outstanding—the world’s stock market capitalization—is the single largest component of the global financial stock. At \$54 trillion at the end of 2010, equities outstanding account for just over 25 percent of the world’s outstanding financial stock. Although the 2010 stock market capitalization was \$11 trillion below its peak in 2007, it accounted for more than half of the growth in global financial assets in 2010 and posted the fastest growth rate (nearly 12 percent). The capitalization of the US equity market rose by \$2.3 trillion and accounted for 40 percent of the global increase. China saw the second-largest increase in the value of its equity securities of some \$526 billion.<sup>12</sup> Growth in equity markets in many countries reflected the continued recovery of depressed valuations following large stock market declines in 2008. However, we also see growth in the book value of equity that reflects rising corporate profits. Growth in the book value of equity has been much more stable than the market value, with an average increase of about 8 percent per annum since 1990.

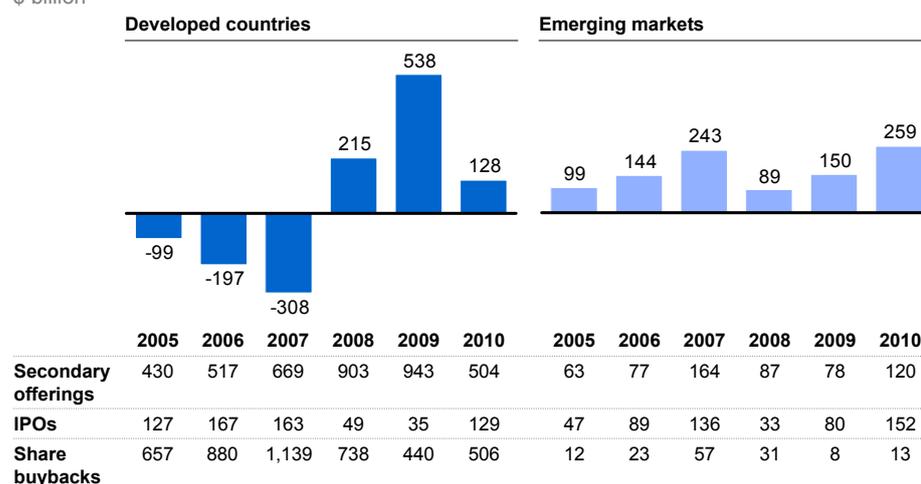
<sup>12</sup> China’s stock market capitalization includes the full value of listed companies, although a substantial portion of shares are held by the government and are not traded.

## Global net equity issuance totaled \$387 billion in 2010, the majority from emerging markets

### Exhibit 3

#### Both developed countries and emerging markets were net equity issuers in 2010

Net equity issuances<sup>1</sup>  
\$ billion



<sup>1</sup> IPOs + secondary offerings – share repurchases; covers publicly listed companies.

NOTE: Split into developed countries and emerging markets based on nationality of issuer.

SOURCE: Dealogic; McKinsey Corporate Performance Analysis Tool (CPAT); McKinsey Global Institute analysis

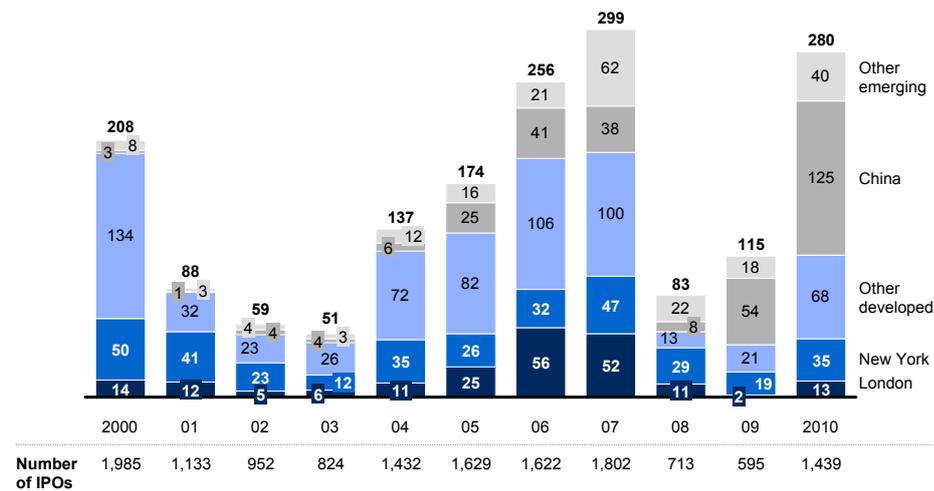
Global net equity issuance totaled \$387 billion in 2010, down from its peak of \$688 billion in 2009. However, global aggregates hide significant differences in equity issuance between developed countries and emerging markets. In developed countries, net equity issuance was negative from 2005 through 2007, as the value of share buybacks exceeded the value of new equity issues. This “de-equitization” was driven by nonfinancial corporations. Net equity issuance in developed countries surged in 2008 and 2009 as firms—predominantly banks—reduced share buybacks and instead raised capital to weather the storm of the financial crisis. Share buybacks declined from their 2007 peak of \$1.1 trillion to just \$440 billion in 2009, increasing slightly to just over \$500 billion in 2010. In contrast to developed countries, net equity issuance in emerging markets has been on the rise as companies have sought stock market listings to signal their competitiveness and as governments began selling portions of state-owned firms. Net issuance among emerging market companies totaled \$259 billion in 2010, with over \$100 billion in both first-time offerings and secondary rounds of equity issuance by successful and growing emerging market firms.

## Initial public offerings on emerging market exchanges surpassed those on developed country exchanges

### Exhibit 4

#### More than half of global IPO volume occurred on emerging market exchanges in 2009 and 2010

Deal volume in different stock exchange locations  
\$ billion



NOTE: Numbers may not sum due to rounding.

SOURCE: Dealogic; McKinsey Global Institute analysis

Growth in the issuance of emerging market equities has coincided with the rise of stock exchanges in these economies, and they are becoming increasingly important venues for raising capital around the world. Initial public offerings on emerging market exchanges totaled just \$11 billion in 2000. By 2007 that number had increased to \$100 billion; by 2010 the total had reached \$165 billion, exceeding initial public offerings on developed countries' stock exchanges. China has been a significant contributor to this growth, with its exchanges—including Hong Kong—attracting \$125 billion, or 44 percent, of total deal volume in 2010. Hong Kong, Shenzhen, and Shanghai have become rivals to London and New York for new listings, not just for emerging market firms but also for corporations headquartered in developed countries. For instance, in May Glencore listed its initial public offering, one of the largest ever for a European firm, in both London and Hong Kong. Prada listed its shares on the Hong Kong exchange in June. Meanwhile, Coca-Cola has begun exploring a listing in Shanghai. Firms around the world are listing in Asia to take advantage of ample capital and hungry investors.

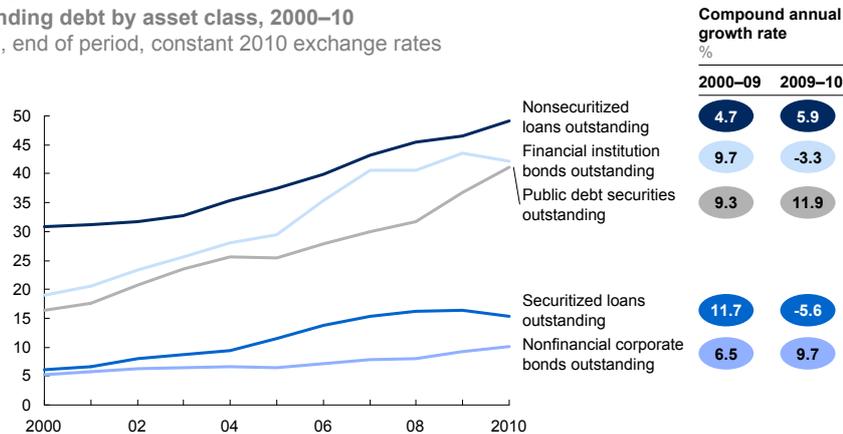
## Global debt to GDP increased from 218 percent in 2000 to 266 percent in 2010

### Exhibit 5

#### Growth in public debt continued in 2010, but nonsecuritized loans remain the largest class of debt

##### Outstanding debt by asset class, 2000–10

\$ trillion, end of period, constant 2010 exchange rates



##### Global debt<sup>1</sup>

\$ trillion	77.6	90.3	105.5	123.9	141.8	158.1
% GDP	218	235	242	249	250	266

1 Sum of financial institution bonds outstanding, public debt securities outstanding, nonfinancial corporate bonds outstanding, and both securitized and nonsecuritized loans outstanding.

SOURCE: Bank for International Settlements; Dealogic; SIFMA; McKinsey Global Banking Pools; McKinsey Global Institute analysis

Global debt outstanding has more than doubled over the past ten years, increasing from \$78 trillion in 2000 to \$158 trillion in 2010. Debt also grew faster than GDP over this period, with the ratio of global debt to world GDP increasing from 218 percent in 2000 to 266 percent in 2010. Most of this growth—\$48 trillion—has been in the debt of governments and financial institutions. Although government debt has been the fastest-growing category, it is notable that bonds issued by financial institutions to fund their balance sheets have actually been a larger class of debt over the past ten years. Indeed, the bonds issued by financial institutions around the world has increased by \$23 trillion over the past decade. In 2010, this shrank by \$1.4 trillion as banks moved to more stable funding sources. Nonsecuritized lending is still the largest component of all debt and continued to grow in 2010.

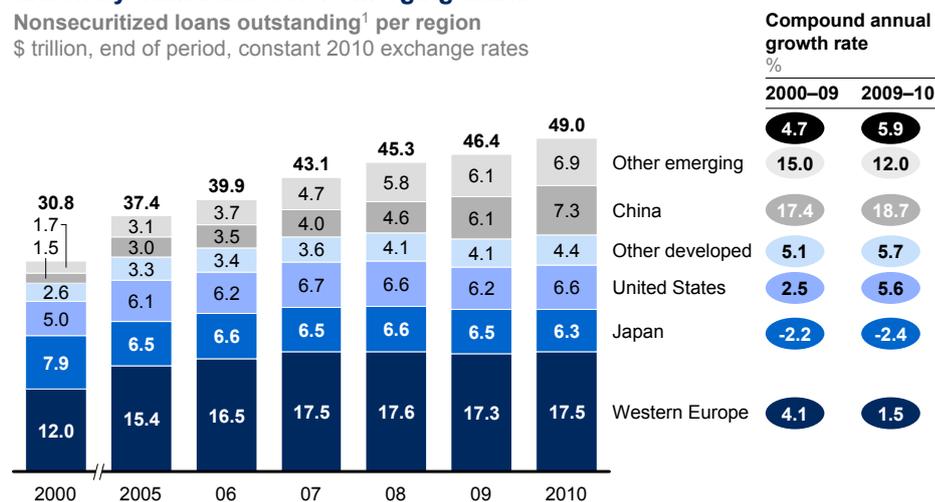
## On-balance-sheet loans increased by \$2.6 trillion in 2010, but growth differed between regions

### Exhibit 6

#### On-balance-sheet lending grew by \$2.6 trillion in 2010, driven by China and other emerging markets

Nonsecuritized loans outstanding<sup>1</sup> per region

\$ trillion, end of period, constant 2010 exchange rates



<sup>1</sup> Borrowings by resident households and corporations, from both domestic and foreign banks; excludes loans to other financial institutions and securitized loans.

NOTE: Numbers may not sum due to rounding.

SOURCE: Bank for International Settlements; International Monetary Fund; Standard & Poor's; SIFMA; national central banks; McKinsey Global Banking Pools; McKinsey Global Institute analysis

Loans held by banks, credit agencies, and other financial institutions account for the largest share of global debt outstanding—at 31 percent. On-balance-sheet loans grew from \$31 trillion in 2000 to \$49 trillion in 2010, an increase of 4.8 percent per annum. However, this global total hides key differences between regions. Since 2007, outstanding loan volumes in both Western Europe and the United States have been broadly flat with a decline in 2009 followed by a modest increase in 2010. In Japan, the stock of loans outstanding has been declining since 2000, reflecting deleveraging by the corporate sector. Lending in emerging markets has grown at 16 percent annually since 2000—and by 17.5 percent a year in China. In 2010, loan balances increased worldwide by \$2.6 trillion. Emerging markets accounted for three-quarters of this growth. China's net lending grew by \$1.2 trillion, partly reflecting government stimulus efforts, while lending in other emerging markets rose by \$800 billion.

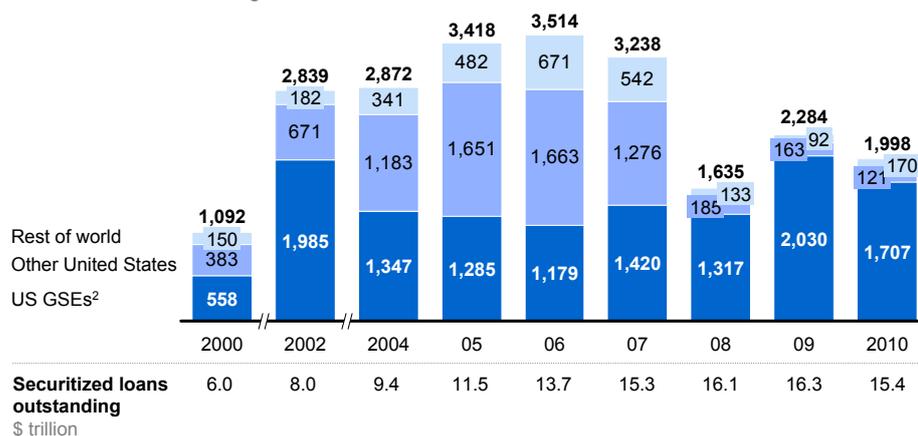
## Issuance of securitized assets has declined sharply in the wake of the 2008 financial crisis

### Exhibit 7

#### Global securitization has dried up since 2007, apart from issues by US government-sponsored enterprises

Global annual securitization<sup>1</sup> issuance

\$ billion, nominal exchange rates



1 Includes asset-backed securities (ABS) and mortgage-backed securities (MBS); also includes agency collateralized debt obligations (CDOs) issued by U.S. GSEs.

2 Government-sponsored enterprises, i.e., Fannie Mae, Freddie Mac, and Ginnie Mae.

NOTE: Numbers may not sum due to rounding.

SOURCE: Dealogic; SIFMA; McKinsey Global Institute analysis

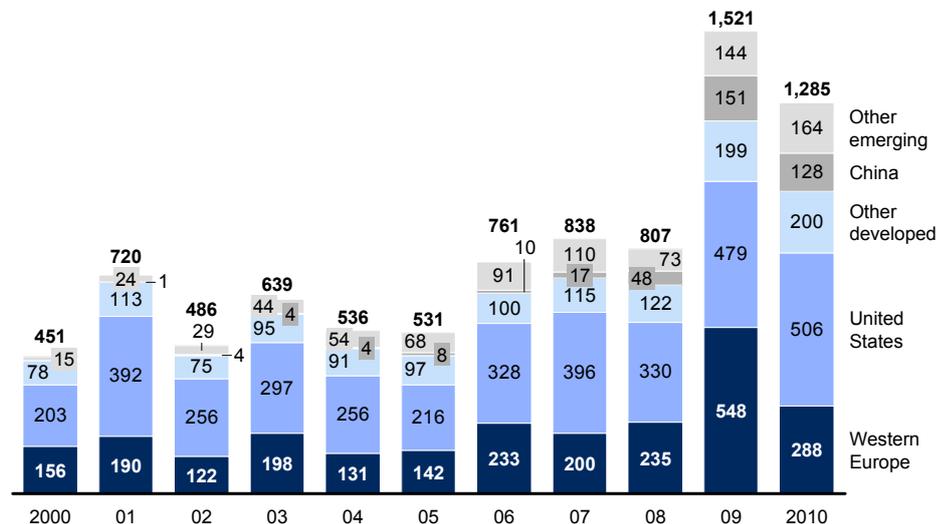
Securitized lending was the fastest-growing segment of global debt from 2000 to 2008 with outstanding volumes increasing from \$6 trillion to \$16 trillion—average growth of 13 percent per year. Roughly 80 percent of securitization issuance over this period occurred in the United States. The issuance of mortgage-backed securities by government-sponsored enterprises more than doubled between 2000 and 2007 and hit a peak in 2002 that was nearly four times as large as in 2000. The creation of asset-backed securities by US banks and other non-government issuers tripled over this period, as did securitization in the rest of the world albeit from much lower levels. Since 2008, securitization by the US private sector and in other parts of the world has fallen dramatically. Only US government-supported mortgage issuers have sustained activity in the market over the past few years—and new issuance in 2009 surged and roughly matched the peak level of 2002. Future prospects in the securitization market are unclear. Regulators are seeking to curtail the shadow banking system, while financial institutions argue that securitization facilitates lending to those in need of credit.

## Nonfinancial corporate bond issues totaled \$1.3 trillion in 2010, 50 percent higher than the pre-crisis level

### Exhibit 8

#### Issuance of corporate bonds remains 50 percent above its pre-crisis level

Nonfinancial corporate bond issuances per region  
\$ billion



NOTE: Numbers may not sum due to rounding.

SOURCE: Dealogic; McKinsey Global Institute analysis

Issuance of corporate bonds by nonfinancial issuers nearly doubled in 2009 compared with 2008 as bank lending standards tightened and interest rates stayed at historic lows. Issuance totaled \$1.5 trillion in 2009, with \$548 billion in Western Europe, a historic high. Corporate bond issuance remained high in 2010 at \$1.3 trillion, more than 50 percent above 2008 levels. Given the pressures on the banking system, those corporations that could access the capital markets directly did so in order to secure long-term financing. Although the majority of growth occurred in developed countries, corporate bond issuance has also grown rapidly in recent years in emerging economies. China's corporate bond issuance peaked at \$151 billion in 2009, up from just \$17 billion in 2007. Corporate bond issues are also increasing in Brazil, Russia, and other emerging markets; their issuance reached \$128 billion in 2010. In total, emerging markets accounted for 23 percent of global corporate issuance in 2010, up from just 15 percent three years earlier. There is still significant room for further growth in corporate bond markets in virtually all countries outside the United States. The United States is the only country where corporations rely on debt capital markets to provide a sizable share of their external financing. Bonds account for 53 percent of corporate debt financing in the United States compared with 24 percent in Western Europe and only 16 percent in emerging economies. Given the higher cost of bank financing, especially in light of new capital requirements, it would be desirable to see a more rapid expansion of debt capital markets in Europe and in emerging markets. This is an important issue for policy makers to address.

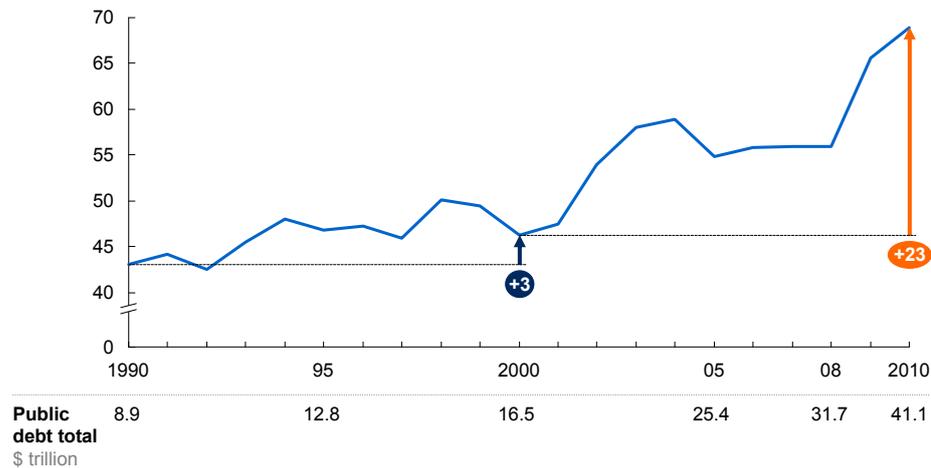
## Government debt has increased by \$9.4 trillion since 2008

### Exhibit 9

#### Global public debt has increased by \$24.6 trillion over the last decade, reaching 69 percent of GDP in 2010

● Growth  
(percentage points)

Gross outstanding public debt<sup>1</sup> as % of GDP  
%, end of period, constant 2010 exchange rates



1 Defined as general government marketable debt securities; excludes government debt held by government agencies (e.g., US Social Security Trust Fund).

SOURCE: Bank for International Settlements; McKinsey Global Institute analysis

Government debt has increased significantly. There was some growth between 2000 and 2008, but the amount of government debt has jumped in 2009 and 2010. Public debt outstanding (measured as marketable government debt securities) stood at \$41.1 trillion at the end of 2010, an increase of nearly \$25 trillion since 2000.<sup>13</sup> This was the equivalent of 69 percent of global GDP, 23 percentage points higher than in 2000. In just the past two years, public debt has grown by \$9.4 trillion—or 13 percentage points of GDP. In 2010, 80 percent of the growth in total debt outstanding came from government debt. While stimulus packages and lost revenue due to anemic growth have widened budget deficits since the crisis, rising global public debt also reflects long-term trends in many advanced economies. Pension and health care costs are increasing as populations age, and unfunded pension and health care liabilities are not reflected in current government debt figures. Without fiscal consolidation, government debt will continue to increase in the years to come.

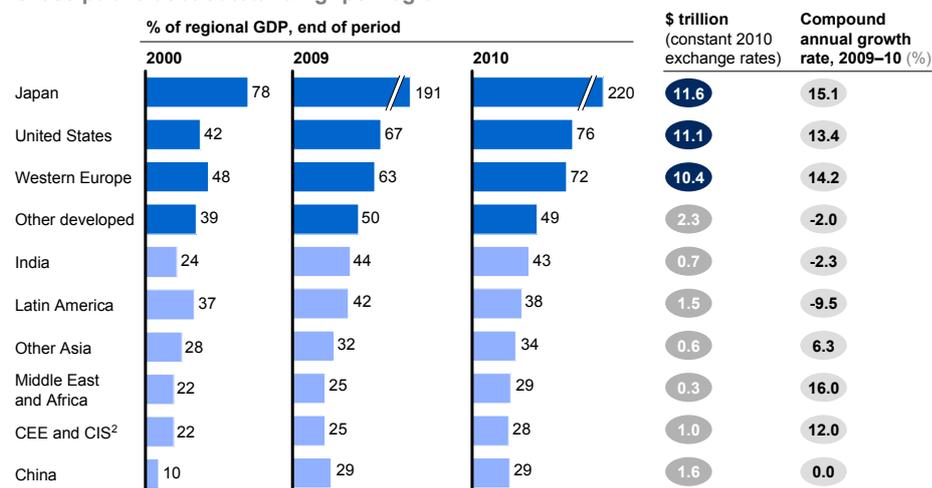
<sup>13</sup> There is no single methodology for measuring government debt. Our data do not include intragovernmental holdings, which some other organizations, such as the International Monetary Fund, include.

## Government debt in many developed countries has risen to unprecedented levels

### Exhibit 10

#### Governments in many developed economies have steadily increased public debt over the last ten years

Gross public debt outstanding<sup>1</sup> per region



1 Defined as general government marketable debt securities; excludes government debt held by government agencies (e.g., US Social Security Trust Fund).

2 Central and Eastern Europe and Commonwealth of Independent States.

SOURCE: Bank for International Settlements; McKinsey Global Institute analysis

In the 1970s, 1980s, and 1990s, there were numerous sovereign debt crises in emerging markets that proved very costly in terms of lost output, lower incomes, and years of slower economic growth.<sup>14</sup> But today it is developed country governments that must act to bring their growing public debt back under control. In most emerging markets, public debt has grown roughly at the same pace as GDP since 2000 and the ratio of government debt to national GDP remains rather small. In contrast, the United States, Japan, and many Western European governments have seen their debt rise significantly. Japan's government debt began rising after its financial crisis in 1990 and has now reached 220 percent of GDP. In both the United States and Western Europe in 2010, the ratio of public debt grew by 9 percentage points to stand at more than 70 percent of GDP by the end of the year. With budgets under pressure from both short-term crisis-related measures and long-term pressures on growth and calls on the public purse (including aging populations in many countries), developed countries may need to undergo years of spending cuts and higher taxes in order to get their fiscal house in order.

14 See *Debt and deleveraging: The global credit bubble and its economic consequences*, McKinsey Global Institute, January 2010 ([www.mckinsey.com/mgi](http://www.mckinsey.com/mgi)); Carmen M. Reinhart and Kenneth Rogoff, *This time is different: Eight centuries of financial folly*, Princeton University Press, 2009.

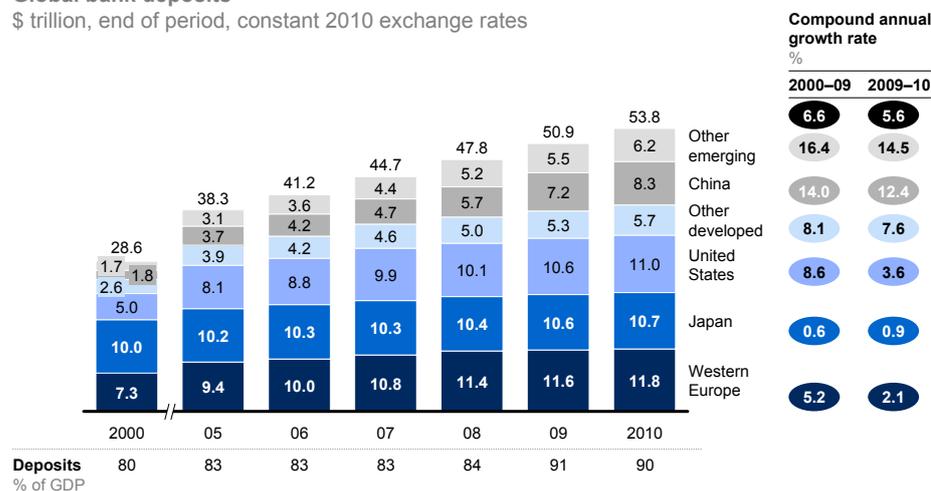
## Global bank deposits increased by 5.6 percent in 2010

### Exhibit 11

#### Bank deposits grew by 5.6 percent to total \$54 trillion globally by the end of 2010

##### Global bank deposits<sup>1</sup>

\$ trillion, end of period, constant 2010 exchange rates



1 Excludes cash in circulation, money market instruments, and deposits made by nonbank financial institutions with other parts of the banking system.

NOTE: Numbers may not sum due to rounding.

SOURCE: National central banks; McKinsey Global Banking Pools; McKinsey Global Institute analysis

Global bank deposits have grown slightly faster than GDP over the past ten years and have increased from 80 percent of GDP in 2000 to 90 percent of GDP at the end of 2010. Among developed countries, deposits grew fastest in the United States, increasing from \$5 trillion in 2000 to \$11 trillion in 2010. This reflected the growing share of household financial assets held in cash rather than bonds or equity shares—a reversal of trend from previous years—as well as rising corporate cash balances. Western European and Japanese deposits grew more slowly as households there have traditionally held more of their wealth in the form of deposits rather than other types of financial assets. Deposits in China and other emerging markets continued their strong growth into 2010, rising 13.6 percent in aggregate to reach \$14.5 trillion. Deposit growth in all these countries is the result not only of years of strong GDP growth and economic development but also the fact that most emerging market households have few alternatives for their investments. Financial systems, not least banking, are underdeveloped in many of these countries. There are an estimated 2.5 billion adults in emerging markets with discretionary income who are not part of the formal financial system.<sup>15</sup> Bank deposits are likely to continue to grow as household incomes rise and individuals open savings accounts.

15 See Alberto Chaia, Tony Goland, and Robert Schiff, “Counting the world’s unbanked,” *McKinsey Quarterly*, March 2010; Alberto Chaia et al, *Half the world is unbanked*, The Financial Access Initiative, October 2009.

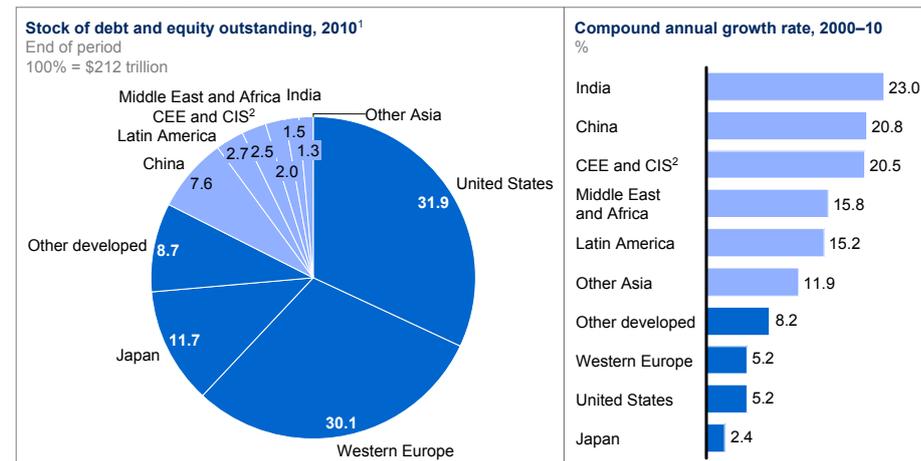
## Emerging markets account for 18 percent of the global financial stock, but their share has tripled since 2000

### Exhibit 12

#### Emerging markets account for the smallest share but also the fastest growth in the global financial stock

■ Developed countries  
■ Emerging markets

Stock of debt and equity outstanding, 2010<sup>1</sup>  
% of total, end of period



<sup>1</sup> Based on a sample of 79 countries.

<sup>2</sup> Central and Eastern Europe and Commonwealth of Independent States.

SOURCE: Bank for International Settlements; Dealogic; SIFMA; S&P; McKinsey Global Banking Pools; McKinsey Global Institute analysis

Today, developed countries account for the vast majority of the capital raised through equity and debt worldwide. However, emerging markets are catching up. In 2010, US households, corporations, and governments accounted for 32 percent of outstanding debt and equity worldwide at \$67.5 trillion. The economies of Western Europe combined accounted for \$63.6 trillion, or about 30 percent of the global total. Japan and other developed economies accounted for roughly 20 percent of the world's debt and equity outstanding. Turning to emerging markets, households, corporations, and governments had outstanding debt and equity of just \$37.1 trillion, or 18 percent of the global total, at the end of 2010. This is far below their share of global GDP of 32 percent. However, emerging markets' share of the global financial stock has tripled since 2000 as their financial systems improve and as the largest corporations and governments tap foreign investors.<sup>16</sup> China accounts for 43 percent of the emerging market share, but almost all emerging market regions have seen their financial stock grow faster than their developed counterparts. In the case of China, its financial stock has grown four times as fast as that of Western Europe and the United States.

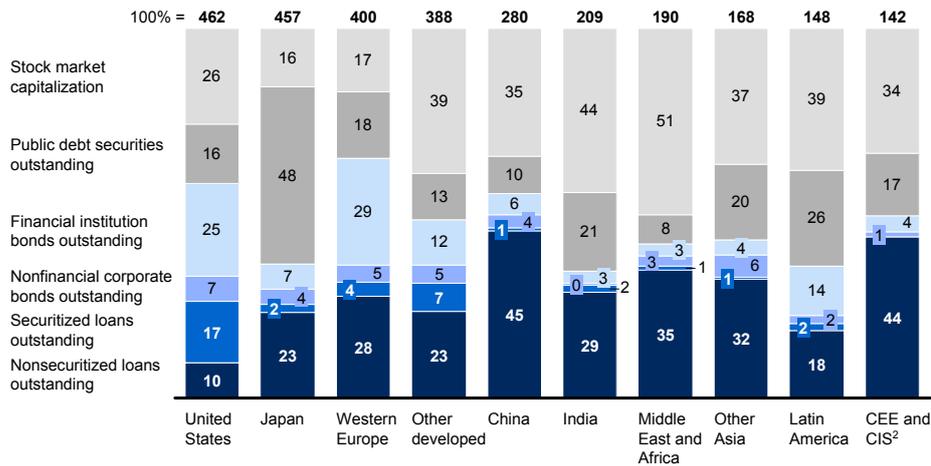
<sup>16</sup> For more on investment in infrastructure, real estate, and other physical assets in emerging markets, see *Farewell to cheap capital? The implications of long-term shifts in global saving and investment*, McKinsey Global Institute, December 2010 ([www.mckinsey.com/mgi](http://www.mckinsey.com/mgi)).

## The composition of funding sources varies across countries

### Exhibit 13

#### The structure of capital and banking markets varies widely between countries

Financial depth, year end 2010<sup>1</sup>  
Percent; % of regional GDP



1 Calculated as total regional debt and equity outstanding divided by regional GDP.

2 Central and Eastern Europe and Commonwealth of Independent States.

SOURCE: Bank for International Settlements; Dealogic; SIFMA; Standard & Poor's; McKinsey Global Banking Pools; McKinsey Global Institute analysis

The depth of a country's financial markets—measured as the value of outstanding bonds, loans, and equity relative to the country's GDP—reveals the extent to which corporations, households, and governments can fund their activities through financial intermediaries and markets. Today, developed countries have much deeper financial markets than those found in emerging markets. Financial depth in the United States, Japan, Western Europe, and other developed countries is near or above 400 percent of GDP, compared with 280 percent in China and around 200 percent or less in other emerging markets. Comparing the components of financial depth across countries reveals that even those with the same level of financial depth can finance themselves in very different ways. For example, nearly half of Japan's financial depth is due to the size of its huge government bond market—taking that market out of the equation would leave Japan with a lower financial depth than that of China. Corporate bond and securitization markets are largest in the United States, while Western Europe relies much more heavily on traditional bank loans for financing. Emerging markets fund themselves mainly through bank lending and equity markets. Bond markets account for a much smaller share of their financial markets overall, except for Latin America.

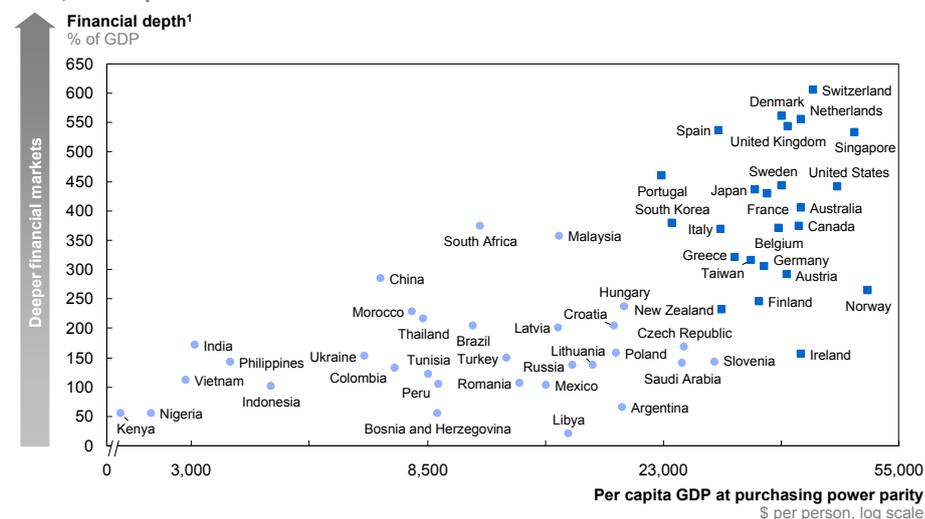
## Emerging markets have ample room to deepen their financial systems

### Exhibit 14

#### Financial markets in developing countries still have significant room for growth

● Emerging  
■ Developed

2010, end of period



1 Calculated as a country's debt and equity outstanding divided by country's GDP.

SOURCE: Bank for International Settlements; Dealogic; SIFMA; Standard & Poor's; McKinsey Global Banking Pools; McKinsey Global Institute analysis

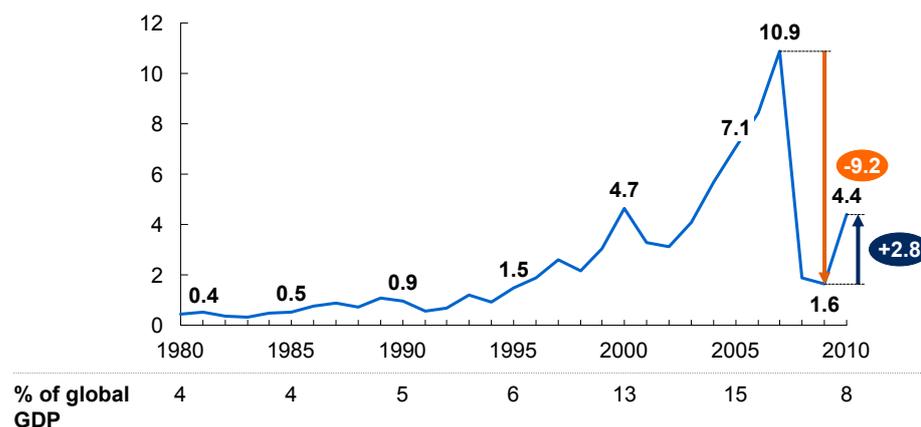
Despite rapid growth in the financial stock of emerging markets over the past decade, there is still ample room for further growth. One reason is that the development of financial markets is associated with higher incomes and a greater degree of economic development. Most emerging markets' financial depth is between 50 and 250 percent of GDP compared with 300 to 600 percent of GDP in developed countries. As emerging economies evolve, it is likely that their financial markets will develop, too. Well-functioning capital and banking markets make it easier for households, corporations, and governments to raise funds for investment. Greater economic output means more excess revenue and income can be invested in capital markets and deposited in banks in order to finance even more productive activity. However, the degree to which financial deepening occurs in many of these countries will depend crucially on whether they have the right regulatory and institutional framework to channel funds to their most productive use. Countries can have very different financial depth even at the same level of income. For instance, Norway has higher per capita GDP than the Netherlands, but its financial markets are half as deep. This reflects the fact that Norway generates large oil revenues but the corporate sector outside minerals is relatively small. In emerging markets, we see that China, Malaysia, and South Africa have a much higher financial depth than do other countries at similar income levels and are roughly on a par with much richer countries including Belgium and Canada.

## Cross-border capital flows have started to recover but still stand at only 40 percent of their record level in 2007

### Exhibit 15

#### Cross-border capital flows grew to \$4.4 trillion in 2010, or 40 percent of their 2007 level

Total cross-border capital inflows, 1980–2010<sup>1,2</sup>  
\$ trillion, constant 2010 exchange rates



1 "Inflows" defined as net purchases of domestic assets by nonresidents (including nonresident banks); total capital inflows comprised of inward FDI and portfolio (e.g., equity and debt) and lending inflows.

2 Based on a sample of 79 countries.

SOURCE: International Monetary Fund; Institute of International Finance; McKinsey Global Institute analysis

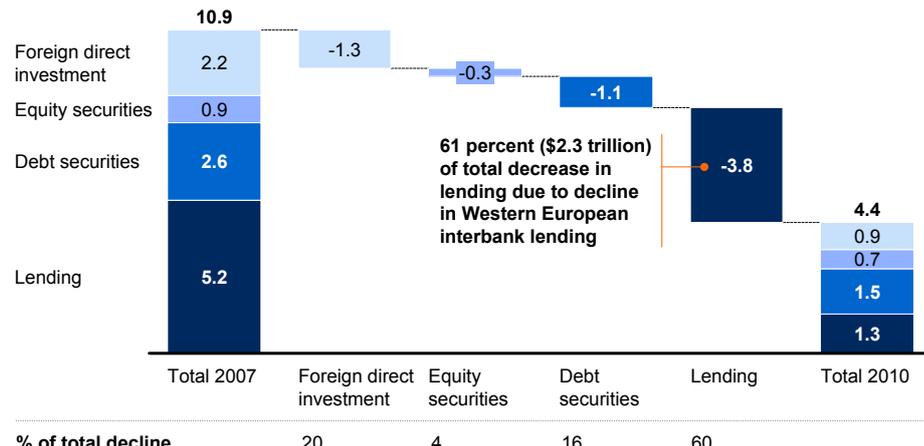
One of the most striking features of global capital markets over the past two decades has been the rise and fall of cross-border capital flows—including foreign direct investment (FDI), purchases of foreign equities and debt securities, and cross-border lending and deposits. From 1994 to 2007, cross-border capital flows grew on average by 23 percent each year. Over this period, these flows increased from 4 percent of global GDP to 20 percent. Increased stability in emerging markets has attracted capital from developed country investors, while the creation of Europe's Economic and Monetary Union has facilitated the flow of capital within Western Europe. However, cross-border capital flows collapsed in 2008 as investors became more cautious and banks became more reluctant to lend internationally. Total capital flows declined from \$10.9 trillion in 2007 to only \$1.9 trillion in 2008—a decrease of 83 percent in a single year. Global capital flows declined even further in 2009, totaling only \$1.6 trillion over the course of the year. There was a rebound in 2010 when capital flows totaled \$4.4 trillion. However, this was only 40 percent of record capital flows in 2007, indicating that the recovery of the global financial system is far from complete.

## Cross-border lending accounted for 60 percent of the decline in total capital flows since 2007

### Exhibit 16

#### A decline in cross-border lending, particularly Western European interbank lending, explains the difference in capital flows between 2007 and 2010

Global cross-border capital inflows, 2007–10  
\$ trillion, constant 2010 exchange rates



NOTE: Numbers may not sum due to rounding.

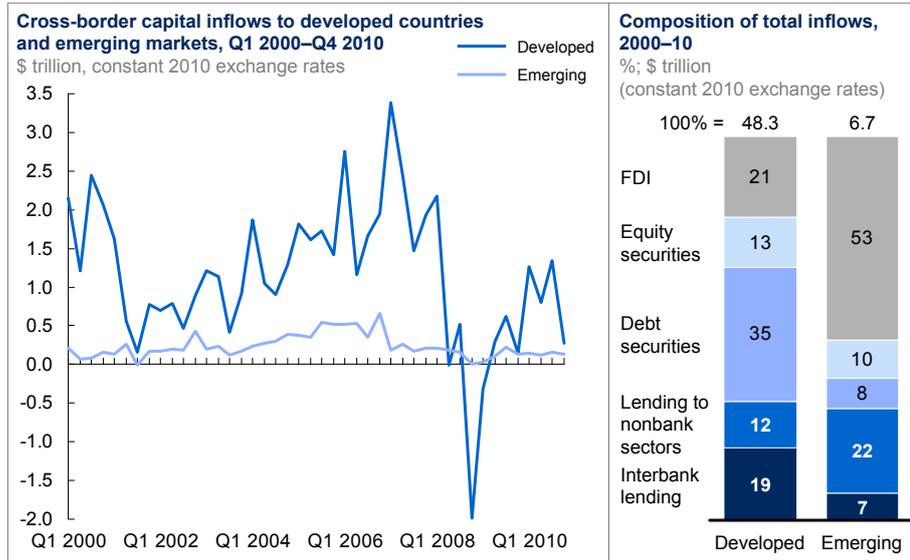
SOURCE: International Monetary Fund; Institute of International Finance; McKinsey Global Institute analysis

The \$6.5 trillion decline in cross-border capital flows from their 2007 peak has been the result of a reduction in most categories. The collapse of the international lending market, specifically the interbank lending in Western Europe, explains the majority of the decline in annual capital flows between 2007 and 2010. Cross-border lending was actually negative in 2008 and 2009 as banks brought their capital back home. The growth in capital flows in 2010 reflects the recovery of this international interbank market, but total lending flows are still only 25 percent of their peak 2007 level. Investment in other categories of developed country capital flows also remain below their 2007 level. Foreign purchases of their debt securities in 2010 were \$1.2 trillion less than their peak in 2007, while firms' FDI was \$1.6 trillion lower than it was in 2007. Across countries, we see that the majority of the decline occurred in capital flows between mature economies—an \$800 billion reduction in capital flows to emerging markets accounts for only 12 percent of the overall decline. Continued instability and low returns in developed countries combined with strong future growth prospects in emerging markets have prompted foreign investor interest in emerging markets.

## Capital flows to developed countries are 20 percent more volatile than flows to emerging markets

### Exhibit 17

#### Capital flows to emerging markets are smaller but more stable than flows to developed countries



SOURCE: International Monetary Fund; McKinsey Global Institute analysis

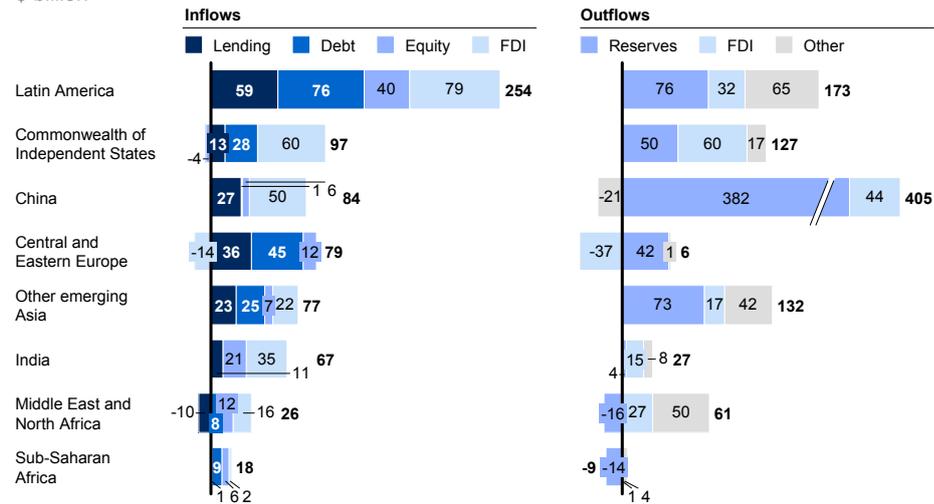
Quarterly data highlight the volatility of cross-border capital flows. But contrary to conventional wisdom, flows to developed countries—not emerging markets—are the most volatile. Capital flows to emerging markets averaged \$226 billion per quarter from 2000 through 2010, peaking at \$520 billion during 2005 and 2006. Capital flows to developed countries were much higher, averaging \$1.1 trillion per quarter. However, these flows were much more volatile, with a high of \$3.4 trillion in the first quarter of 2007 and a low of minus \$2.0 trillion in the final quarter of 2008. Overall, we calculate that capital flows to developed countries, adjusted for their size, are 20 percent more volatile than flows to emerging markets. We can partly explain this difference in volatility by comparing the composition of capital flows between developed countries and emerging markets. From 2000 to 2010, FDI, the least volatile type of flow, comprised 53 percent of total capital flows to emerging markets. But in developed countries, highly volatile cross-border lending flows are the largest type of capital flow.

## Emerging markets were net capital exporters in 2010 with \$922 billion of outflows, 31 percent more than inflows

### Exhibit 18

#### Capital outflows from emerging markets remained significant even after the crisis, totaling \$922 billion in 2010

Cross-border capital flows to and from emerging markets, 2010  
\$ billion



NOTE: Numbers may not sum due to rounding.

SOURCE: International Monetary Fund; Institute of International Finance; McKinsey Global Institute analysis

Foreign capital flows into emerging markets totaled \$702 billion in 2010. This was only half of their peak of \$1.5 trillion in 2007 but four times their level of 2000. Flows to Latin American countries surged in comparison with the previous year to a total of \$254 billion. Flows to the Commonwealth of Independent States (CIS) were second-largest among developing economies at \$97 billion and flows to China the third-largest at \$84 billion. Of the total capital flows to emerging markets, foreign direct investment accounted for the largest share at 36 percent, followed by foreign purchases of debt securities (27 percent), cross-border lending (23 percent), and foreign purchases of equity securities (14 percent). While these flows reflect strong fundamentals in many emerging market regions, they have also stoked fears of asset bubbles, unwanted exchange-rate appreciation, and overheating—in Brazil, for instance. At the same time, emerging markets are becoming an increasingly important source of foreign capital. Emerging markets were net capital exporters in 2010, as outflows totaled \$922 billion, 31 percent more than inflows. About 55 percent of this capital outflow came from central bank purchases of foreign-exchange reserves. However, emerging market corporations are now a growing source of FDI, reaching \$159 billion in 2010.

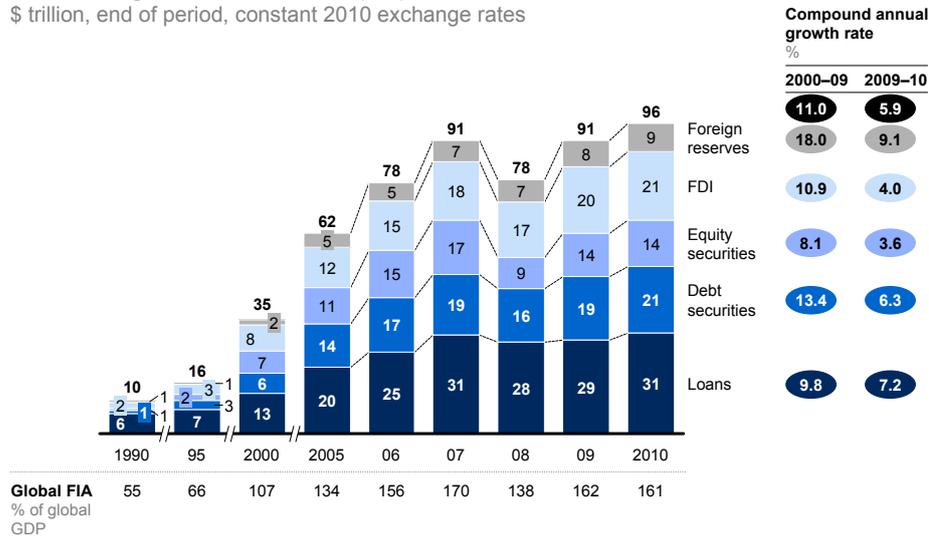
## Global foreign investment assets hit a historical high of \$96 trillion in 2010

### Exhibit 19

#### The stock of global foreign investment assets reached \$96 trillion in 2010

Global foreign investment assets (FIA)<sup>1</sup>

\$ trillion, end of period, constant 2010 exchange rates



<sup>1</sup> Based on a sample of 79 countries.

NOTE: Numbers may not sum due to rounding.

SOURCE: International Monetary Fund; McKinsey Global Institute analysis

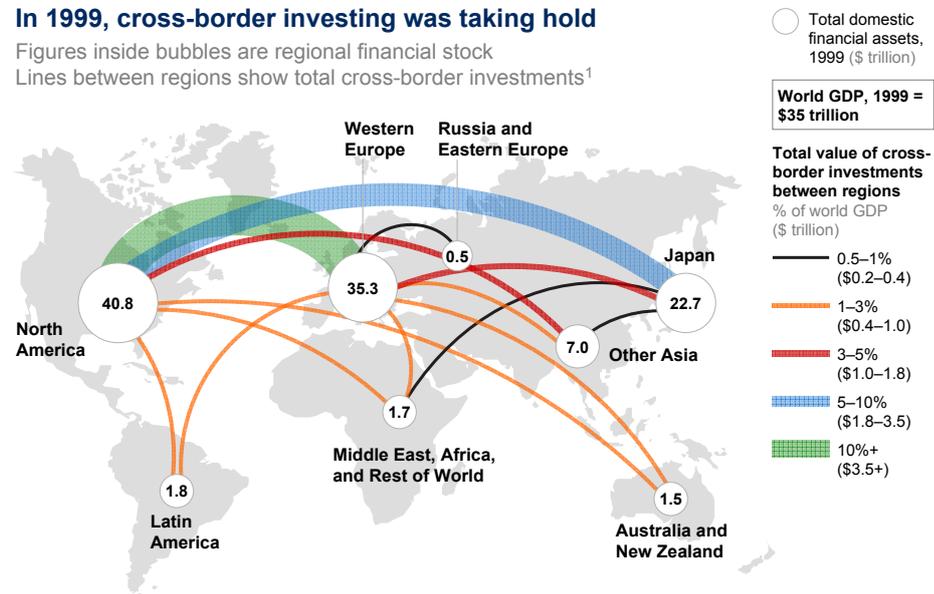
Reflecting growth in global capital flows, the world's stock of foreign investment assets also increased in 2010. Global foreign investment assets reached a historical high of \$96 trillion in 2010, nearly ten times the amount in 1990. Central bank foreign reserves were the fastest-growing component, reaching \$8.7 trillion by the end of 2010, a sizable share (9 percent) of the world's financial stock that is invested in government bonds and other low-risk securities. Foreign direct investment assets of companies reached a new high of \$21 trillion, as did the stock of foreign debt securities held by institutional and private investors. Banks expanded their international lending, with the stock of cross-border loans returning to its 2007 level at \$31 trillion. The degree to which financial integration will continue into 2011 and beyond will depend not only on international macroeconomic prospects but also on the international regulatory framework still under construction in response to the 2008 financial crisis.

## The global web of cross-border investments in 1999 centered on the United States and Western Europe

### Exhibit 20a

#### In 1999, cross-border investing was taking hold

Figures inside bubbles are regional financial stock  
Lines between regions show total cross-border investments<sup>1</sup>



<sup>1</sup> Includes total value of cross-border investments in equity and debt securities, loans and deposits, and foreign direct investment.

SOURCE: International Monetary Fund; McKinsey Global Institute analysis

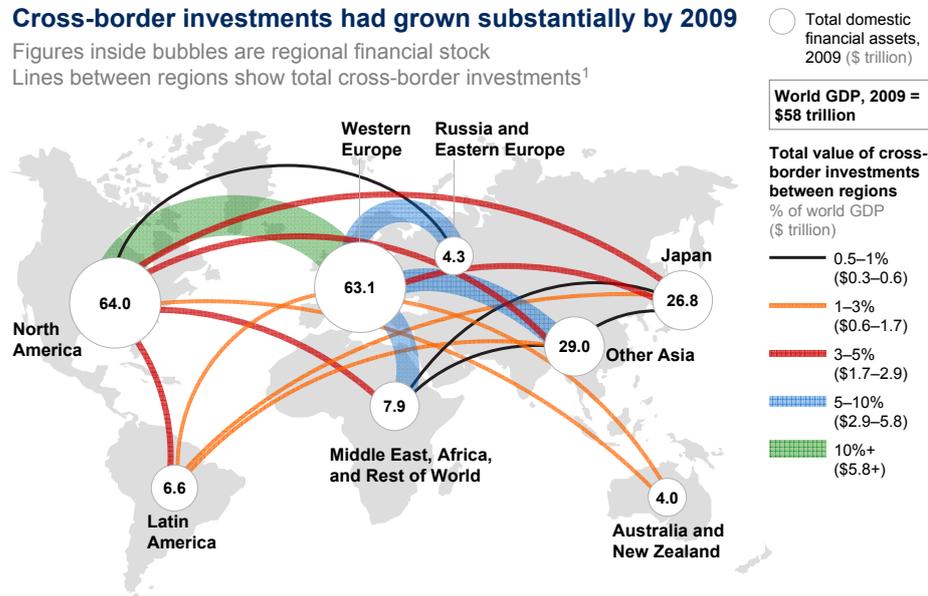
Global financial integration began in earnest in the 1990s. Companies from developed countries—and particularly the United States—began to invest abroad, and investors sought to diversify their portfolios internationally. By the end of 1999, the stock of foreign investment assets had already become significant, reaching \$28 trillion, or 79 percent of global GDP. The largest cross-border ties were between the United States, Western Europe, and to a lesser extent Japan. At that time, the United States was partner to 50 percent of all outstanding international financial positions. Linkages to emerging markets—China, other parts of emerging Asia, Latin America, and Central and Eastern Europe—were small, in most cases less than \$1 trillion. Investors in developed countries had limited information on emerging market opportunities and, after the 1997 Asian financial crisis, feared potential macroeconomic and political instability. Investors in emerging markets had limited access to financial markets in other parts of the world—in fact, many emerging markets lacked even a domestic financial system that facilitated an outflow of capital by companies and households.

## By 2009, the web of cross-border investments had grown more complex

### Exhibit 20b

#### Cross-border investments had grown substantially by 2009

Figures inside bubbles are regional financial stock  
Lines between regions show total cross-border investments<sup>1</sup>



<sup>1</sup> Includes total value of cross-border investments in equity and debt securities, loans and deposits, and foreign direct investment.

SOURCE: International Monetary Fund; McKinsey Global Institute analysis

During the 2000s, the growing stock of foreign investment assets included not only increased cross-border investment between the traditional centers of financial wealth, but also the growth and development of financial linkages with emerging markets. By 2009, the US share of total cross-border investments had shrunk to 32 percent, down from 50 percent in 1999. This reflected both a surge in cross-border investments within Western Europe following the creation of the euro and phenomenal growth in the size and complexity of linkages with emerging markets. Eastern Europe, the Middle East, Latin America, Africa, and emerging Asia now all hold significant cross-border positions with Western Europe. Moreover, there are now a number of “south-south” linkages between different emerging market regions as governments and corporations in these countries become more active players in global markets. Latin America, for instance, has roughly the same amount of cross-border investments with emerging Asia as it does with Western Europe. These financial connections between emerging markets are growing much faster than those with the United States. Before the 2008 global financial crisis, international investments between emerging Asia, Latin America, and the Middle East were growing at an average rate of 39 percent per year—roughly twice as fast as their investments with developed countries. In short, the web of cross-border investments is changing as the economic and political connections between diverse regions proliferate and deepen.

## Investors from developed countries hold 87 percent of global foreign investment assets

### Exhibit 21

#### In 2010, the United States was the world's largest foreign debtor and Japan the globe's largest foreign creditor

Net position, 2010<sup>1</sup>

\$ billion

Largest net foreign debtors <sup>1</sup>				Largest net foreign creditors <sup>1</sup>			
		Assets	Liabilities			Assets	Liabilities
United States	-3,072	15,284	18,356	Japan	3,010	6,759	3,748
Spain	-1,263	1,673	2,936	China	2,193	3,892	1,699
Australia	-752	1,044	1,796	Germany	1,207	7,323	6,116
Brazil	-703	587	1,290	Saudi Arabia	882	1,084	202
Italy	-453	2,734	3,187	Switzerland	698	3,047	2,348
United Kingdom	-446	10,943	11,390	Hong Kong	691	2,723	2,032
Mexico	-355	259	613	Taiwan	626	1,015	389
Greece	-331	315	646	United Arab Emirates	585	783	198
France	-325	6,622	6,947	Singapore	492	1,376	884
Poland	-308	162	470	Norway	360	1,122	762

<sup>1</sup> Calculated as foreign investment assets less foreign investment liabilities.

SOURCE: International Monetary Fund; McKinsey Global Institute analysis

The United States is the world's largest foreign investor, with \$15.3 trillion in foreign assets, followed by the United Kingdom with \$10.9 trillion and Germany with \$7.3 trillion. However, looking at the net position of each country's foreign assets and liabilities reveals a different picture. The United States is also the world's largest net foreign debtor, with foreign liabilities exceeding assets by \$3.1 trillion—equivalent to 21 percent of GDP. This reflects the low US saving rate and persistent current account deficit that has to be funded through net foreign borrowing. Spain is the world's second-largest foreign debtor with net debt of \$1.3 trillion or 91 percent of GDP. On the creditor side, Japan remains the world's largest net foreign creditor, with net assets of just over \$3 trillion. This may seem surprising given that Japan has the world's largest government debt at more than 200 percent of GDP. However, Japanese savers, banks, and corporations—not foreign investors—hold more than 90 percent of this debt. At the same time, Japan has significant foreign investment assets including roughly \$1 trillion of central bank reserve assets, \$830 billion in foreign direct investment abroad, \$3.3 trillion of foreign equity and debt securities, and \$1.6 trillion in foreign lending and deposits. China is the second-largest net foreign creditor. Foreign investment assets owned by high-saving emerging markets, particularly in Asia and the Middle East, have grown at twice the pace of those of mature countries since 2000. This reflects companies, households, and governments diversifying their portfolios internationally and tapping into opportunities abroad. More broadly, the growth of foreign investment positions reflects the integration of the global economy and financial markets.

## Related McKinsey Global Institute publications



### **Farewell to cheap capital? The implications of long-term shifts in global investment and saving (December 2010)**

By 2020, half of the world's saving and investment will take place in emerging markets, and there will be a substantial gap between global investment demand and the world's likely saving. This will put upward pressure on real interest rates and require adjustment by financial institutions, nonfinancial companies, investors, and policy makers.



### **Debt and deleveraging: The global credit bubble and its economic consequences (January 2010)**

The recent bursting of the great global credit bubble has left a large burden of debt weighing on many households, businesses, and governments, as well as on the broader prospects for economic recovery in countries around the world. Leverage levels are still very high in ten sectors of five major economies. If history is a guide, one would expect many years of debt reduction in these sectors, which would exert a significant drag on GDP growth.



### **Global capital markets: Entering a new era (September 2009)**

World financial assets fell by \$16 trillion to \$178 trillion in 2008, marking the largest setback on record. Looking ahead, mature financial markets may be headed for slower growth, while emerging markets will likely account for an increasing share of global asset growth.



### **The new power brokers: How oil, Asia, hedge funds, and private equity are faring in the financial crisis (July 2009)**

The power brokers' collective performance in the financial crisis, though better than the sharp declines in wealth of most institutional investors, masks an important shift: Asian sovereign and petrodollar investors emerged as more influential than ever, while hedge funds and private equity saw their previously rapid growth interrupted.

[www.mckinsey.com/mgi](http://www.mckinsey.com/mgi)

eBook versions of selected MGI reports are available at MGI's website, Amazon's Kindle bookstore, and Apple's iBookstore.

Download and listen to MGI podcasts on iTunes or at [www.mckinsey.com/mgi/publications/multimedia/](http://www.mckinsey.com/mgi/publications/multimedia/).

